Call for Letters of Intent
on
Neutron Instruments at the Spallation Neutron Source
of
JAERI-KEK Joint Project on High Intensity Proton Accelerators

The JAERI-KEK Joint Project on High Intensity Proton Accelerators received its construction fund starting on April 1, 2001. It is expected that this project be completed in JFY2006, providing with the first beams in April 2007. One of major research facilities of the project is an intense pulsed spallation neutron source for neutron scattering research, fundamental physics with neutrons, and so on. To promote these sciences the instrumentation is the key issue. We would like to call for letters of intent at this time for the instrumentation from all over the world.

Scope of the Project

The approved portion of the accelerators in this facility consists of a 3 GeV proton synchrotron injected from a linac and a 50 GeV proton synchrotron with MW-class beam power at both 3 GeV and 50 GeV. The 3GeV beam will be extracted to the Materials and Life Science Experimental Facility for the use of a spallation neutron source and a muon source. The spallltion neutron source will produce pulsed neutrons with 25Hz, and these pulsed neutrons are the major focus in the present call for LOI's. The 50 GeV beam will be used for nuclear and particle physics experiments.

Selection Process

Each LOI will be reviewed first by a peer review group and, then, it will be discussed at the Neutron Instruments Planning Committee. Based on the results of discussions, recommendations for the selected LOI's will be made to the Project Director. Selection criteria include scientific merits, capability of the proposed group, etc. During the coming few years the call of LOI's will be made once a year.

General Policy for Instrumentation

We would like to call for LOI's with the following policy.

1) In principle, the proposed instrument must be constructed and maintained by the proposed group.
2) The proposed instrument will be used for the duration of α years.
3) The group that proposed its instrument has the right of using a fraction of β% beam time for their own scientific program, whereas the remaining (100-β)% beam time must be open for a general usage. For the portion of the latter usage, a separate PAC will select the proposals.
4) Values of α and β will be discussed and assigned by the Neutron Instruments Planning Committee.
5) The beamtime charge is in the process of negotiation with the government.

Needed Information in LOI

Each LOIs must contain, at a minimum, the items listed below. The length of LOI need not be long (an approximate guideline is that the entire length is 10 pages or less).

1) Name of the proposal
2) Spokesperson(s) and/or Contact Person(s) (name, title, affiliation, address, telephone number, fax number, and e-mail address).
3) Short explanation of the proposed instrument. In this description, identify the type of the moderator to be used (a cold moderator, a decoupled poisoned cold moderator or a decoupled cold moderator).
4) Description of anticipated research program elements using the proposed instrument, with emphasis on the unique uses of the spallation source.
5) Desired values of α and β.
6) Possibility of funding for instrument construction, together with an expected manpower.
7) Other useful information, such as commitments to other proposals, etc.

Other Information

1) Deadline: November 29, 2002.

2) LOI must be sent to:

Professor S. Nagamiya

Director, Project Office of High Intensity Proton Accelerators

KEK, 1-1 Oho

Tsukuba-shi, 305-0801, Japan

3) Consultation on the information on LOI:

Dr. Y. Oyama (oyama@cens.tokai.jaeri.go.jp)

and Professor S. Ikeda (susumu.ikeda@kek.jp)

Neutron Science Group for the Joint Project

4) Process after receiving LOI's:

Based on the recommendations by the Neutron Instruments Planning Committee, the Director will inform the results to the individual groups. The selected groups are going to be invited to submit full proposals. Guidelines for the full proposal will be described separately.